CLAIMS

1. Use of a compound capable of modulating the level of activity of the OAS gene and/or activity of the OAS protein, in the manufacture of a medicament for the treatment of a patient with or at risk of hepatitis C infection, wherein the compound is not an interferon or an isoprenoid, such as geranylgeranylacetone (GGA).

2. A method of screening for compounds for treating HCV infection, wherein a cell is treated with a test compound and any change in OAS gene activity and/or OAS protein activity or level is assessed, wherein the compound is not an interferon or an isoprenoid, such as geranylgeranylacetone (GGA).

3. A method as defined in claim 2, wherein the cell is an animal cell.

4. A method as defined in claims 2 and 3, wherein the cell is a human cell.

5. A method of screening for compounds for treating HCV infection, wherein the effect of a test compound on the activity of OAS is assessed, wherein the compound is not an interferon or an isoprenoid, such as geranylgeranylacetone (GGA)

6. A compound capable of modulating the level of activity of the OAS gene and/or activity of the OAS protein identified or identifiable from the methods of any one of claims 2 – 5.

7. Use of a compound as defined in claim 6 for the manufacture of a medicament for the treatment of a patient with or at risk of hepatitis C infection.

8. Use of a compound capable of modulating the level of activity of the RNAse L gene and/or activity of the RNAse L protein, in the manufacture of a medicament for the treatment of a patient with or at risk of hepatitis C infection, wherein the compound is not an interferon or an isoprenoid, such as geranylgeranylacetone (GGA).

9. A method of screening for compounds for treating HCV infection, wherein a cell is treated with a test compound and any change in RNAse L gene activity and/or RNAse L protein activity or level is assessed, wherein the compound is not an interferon or an isoprenoid, such as geranylgeranylacetone (GGA).

10. A method as defined in claim 9, wherein the cell is an animal cell.

11. A method as defined in claims 9 and 10, wherein the cell is a human cell.

12. A method of screening for compounds for treating HCV infection, wherein the effect of a test compound on the activity of RNAse L is assessed, wherein the compound is not an interferon or an isoprenoid, such as geranylgeranylacetone (GGA)

13. A compound capable of modulating the level of activity of the RNAse L gene and/or activity of the RNAse L protein as identified or identifiable from the methods of any one of claims 9 - 12.

14. Use of a compound as defined in claim 13 in the manufacture of a medicament for the treatment of a patient with or at risk of hepatitis C infection

15. Use of a compound capable of modulating the level of activity of the 2'-5' phosphodiesterase gene and/or activity of the 2'-5' phosphodiesterase protein, in the manufacture of a medicament for the treatment of a patient with or at risk of hepatitis C infection, wherein the compound is not an interferon or an isoprenoid, such as geranylgeranylacetone (GGA)

16. A method of screening for compounds for treating HCV infection, wherein a cell is treated with a test compound and any change in 2'-5' phosphodiesterase gene activity and/or 2'-5' phosphodiesterase protein activity or level is assessed, wherein the compound is not an interferon or an isoprenoid, such as geranylgeranylacetone (GGA)

17. A method as defined in claim 16, wherein the cell is an animal cell.

18. A method as defined in claims 16 and 17, wherein the cell is a human cell.

19. A method of screening for compounds for treating HCV infection, wherein the effect of a test compound on the activity of 2'-5' phosphodiesterase is assessed, wherein the compound is not an interferon or an isoprenoid, such as geranylgeranylacetone (GGA)

20. A compound capable of modulating the level of activity of the 2'-5' phosphodiesterase gene and/or activity of the 2'-5' phosphodiesterase protein identified or identifiable from the methods of any one of claims 16 – 19.

21. Use of a compound as defined in claim 20 for the manufacture of a medicament for the treatment of a patient with or at risk of hepatitis C infection.

22. Use of a nucleic acid which hybridises selectively to a OAS nucleic acid in the manufacture of a medicament for the treatment of a patient with or a risk of HCV infection.

23. Use of a nucleic acid which hybridises selectively to a OAS nucleic acid in the manufacture of a diagnostic reagent for use in the assessment or diagnosis of a patient with or a risk of HCV infection.

24. The use of claim 22or 23 wherein the nucleic acid comprises the polynucleotide sequence shown in Figure 1 or a fragment thereof, wherein the nucleotide sequence at 84bp into the untranslated 3' end of exon 8 is A.

25. The use of claim 22 or 23 wherein the nucleic acid comprises the polynucleotide sequence shown in Figure 1 or a fragment thereof, except that the nucleotide sequence at position 84bp into the untranslated 3' end of exon 8 is G.

26. A method of determining whether a patient with or at risk of HCV infection has an OAS1 gene in which the nucleotide sequence at position 84bp into the untranslated 3' end of exon 8 is G, wherein the method comprises the step of determining the OAS1 genotype of said patient.

27. A method as defined in claim 26 comprising the step of performing an allele specific PCR reaction using polynucleotides having or comprising the DNA sequences:- (1) CTCACTGAGGAGCTTTGTCT

(2) CACTGAGGAGCTTTGTCC

and/or (3) CAGGTGGGACTCTTGATCCAG.

28. A method of determining the relative prospects of recovery from infection and/or success of treatment with interferon of a patient with or at risk of HCV infection, comprising determining the OAS genotype of the patient.

29. The method of claim 28, comprising a method according to claim 25, 26 or 27.

30. A method of selecting a method of treatment of a patient with or at risk of HCV infection, comprising a method according to any one of claims 25 to 29.

31. Use of an OAS polypeptide in the manufacture of a medicament for the treatment of a patient with or at risk of HCV infection.

32. A pharmaceutical composition comprising a compound, polynuclotide or polypeptide as defined in claim 6,14, 21, 22 or 31 and a physiologically acceptable excipient.

33. A pharmaceutical composition according to claim 32 further comprising a therapeutically appropriate quantity of an interferon.

34. The use of claim 6, 14, 21, 22 or 31 wherein the DNA sequence of the OAS1 genes of the said patient are as defined in claim 25.

35. A method of treating a patient with or at risk of HCV infection by administering a therapeutically appropriate quantity of a pharmaceutical composition according to claims 33.

36. A pharmaceutical composition or a kit of parts comprising (1) (a) a compound that is capable of modulating the level of activity of the OAS1

gene and/or activity of the OAS1 protein, and/or (b) a compound that is capable of modulating the level of activity of the RNAse L gene and/or activity of the RNAse L protein, and/or (c) a compound that is capable of modulating the level of activity of the 2'-5' phosphodiesterase gene and/or activity of the 2'-5' phosphodiesterase protein, and/or (d) a recombinant polynucleotide as defined in claim 22, and (2) a therapeutically appropriate quantity of an interferon, for example an interferon-α, for example interferon-α8, and optionally (3) a pharmaceutically acceptable diluent or carrier.